Canon EOS 7D Firmware v2
Specification Sheet

IMAGE SENSOR		
	Type	22.3mm x 14.9mm CMOS
	Effective Pixels	Approx. 18.00 megapixels
	Total Pixels	Approx. 19.00 megapixels
	Aspect Ratio	3:2
	Low-Pass Filter	Built-in/Fixed with fluorine coating
	Sensor Cleaning	EOS integrated cleaning system
	Colour Filter Type	Primary Colour
IMAGE PROCESSOR		
	Type	Dual "DIGIC 4"
LENS		
	Lens Mount	EF/EF-S
	Focal Length	Equivalent to 1.6x the focal length of the lens
FOCUSING		
	Type	TTL-CT-SIR with a CMOS sensor
	AF System/ Points	19 cross-type AF points (f/2.8 at centre) (1)
	AF working range	EV -0.5 - 18 (at 23°C & ISO100)
	AF Modes	AI Focus One Shot AI Servo
	AF Point Selection	Automatic selection: 19 point AF Manual selection: Single point AF Manual selection: Spot AF Manual selection: AF point Expansion Manual selection: Zone AF AF points can be selected separately for vertical and horizontal shooting
	Selected AF point display	Indicated by a transmissive LCD in viewfinder and on top LCD panel and Quick Control screen
	Predictive AF (2)	Yes, up to 8m
	AF Lock	Locked when shutter button is pressed half way in One Shot AF mode or AF-ON button is pressed
	AF Assist Beam	Intermittent firing of built-in flash or emitted by optional dedicated Speedlite
	Manual Focus	Selected on lens, default in Live View Mode
	AF Microadjustment	C.Fn III-5 +/- 20 steps Adjust all lenses by same amount Adjust up to 20 lenses individually
EXPOSURE CONTROL		
	Metering modes	TTL full aperture metering with 63 zone Dual Layer SPC Evaluative metering (linked to All AF point) Partial metering (approx. 9.4% of viewfinder at centre) Spot metering (approx. 2.3% viewfinder at centre) Centre weighted average metering
	Metering Range	EV 1 - 20 (at 23°C with 50mm f/1.4 lens ISO100)
	AE Lock	Auto: In 1-shot AF mode with evaluative metering exposure is locked when focus is achieved Manual: By AE lock button in creative zone modes
	Exposure Compensation	+/-5 EV in 1/3 or 1/2 stop increments (can be combined with AEB)
	AEB	3 Shots +/-3 EV 1/3 or 1/2 stop increments
	ISO Sensitivity (3)	Auto (100-6400, max ISO can limited by user), 100-6400 (in 1/3-stop or whole stop increments) ISO can be expanded to H: 12800

SHUTTER		
	Type	Electronically-controlled focal-plane shutter
	Speed	30-1/8000 sec (1/2 or 1/3 stop increments), Bulb (Total shutter speed range. Available range varies by shooting mode)
WHITE BALANCE		
	Type	Auto white balance with the imaging sensor
	Settings	AWB, Daylight, Shade, Cloudy, Tungsten, White Fluorescent light, Flash, Custom, Colour Temperature Setting. White balance compensation: Blue/Amber +/-9 Magenta/ Green +/-9
	Custom White Balance	Yes, 1 setting can be registered
	WB Bracketing	+/-3 levels in single level increments 3 bracketed images per shutter release Selectable Blue/Amber bias or Magenta/ Green bias
VIEWFINDER		
	Type	Pentaprism
	Coverage (Vertical/Horizontal)	Approx. 100%
	Magnification	Approx. 1.0x[(4)]
	Eyepoint	Approx. 22mm (from eyepiece lens centre)
	Dioptre Correction	-3 to +1 m^{-1} (dioptre)
	Focusing Screen	Fixed (Transmissive LCD screen)
	Mirror	Quick-return half mirror (Transmission: reflection ratio of 40:60, no mirror cut-off with EF600mm f/4 or shorter)
	Viewfinder Information	AF information: AF points, focus confirmation light Exposure information: Shutter speed, aperture value, ISO speed (always displayed), AE lock, exposure level/compensation, spot metering circle, exposure warning, AEB Flash information: Flash ready, high-speed sync, FE lock, flash exposure compensation, red-eye reduction light Image information: White balance correction, CF card information, monochrome shooting, maximum burst (2 digit display), Highlight tone priority (D+) Composition information: Grid, Dual Axis Electronic level
	Depth of field preview	Yes, with Depth of Field preview button.
	Eyepiece shutter	On strap
LCD MONITOR		
	Type	7.5cm (3.0") Clear View II TFT, approx. 920K dots
	Coverage	Approx. 100%
	Viewing Angle (horizontally/vertically)	Approx 160°
	Coating	Anti-reflection and Solid Structure
	Brightness Adjustment	Auto: Using extenal ambient light sensor Manual: Adjustable to one of seven levels
	Display Options	Quick Control Screen Camera settings Dual Axis Electronic Level

FLASH		
	Built-in Flash GN (ISO 100, meters)	12
	Built-in Flash Coverage	up to 15mm focal length (35mm equivalent: 24mm)
	Built-in Flash recycle time	Approx. 3 seconds
	Modes	Auto, Manual flash, Multi flash, Integrated Speedlite Transmitter
	Red-Eye Reduction	Yes
	X-sync	1/250sec
	Flash Exposure Compensation	+/- 3EV in 1/2 or 1/3 increments
	Flash Exposure Bracketing	Yes, with compatible External Flash
	Flash Exposure Lock	Yes
	Second Curtain Synchronisation	Yes
	HotShoe/ PC terminal	Yes/ Yes
	External Flash Compatibility	E-TTL II with EX series Speedlites, wireless multi-flash support
	External Flash Control	via camera menu screen
SHOOTING		
	Modes	Auto (Stills and Movie), Creative Auto, Program AE, Shutter priority AE, Aperture priority AE, Manual (Stills and Movie), Custom (x3)
	Picture Styles	Standard, Portrait, Landscape, Neutral, Faithful, Monochrome, User Defined (x3)
	Colour Space	sRGB and Adobe RGB
	Image Processing	Highlight Tone Priority Auto Lighting Optimizer (4 settings) Long exposure noise reduction High ISO speed noise reduction (4 settings) Auto Correction of Lens Peripheral illumination RAW image processing - during image Playback only Resize to M or S
	Drive modes	Single, Continuous L, Continuous H, Self timer (2s+remote, 10s +remote)
	Continuous Shooting	Max. Approx. 8fps. (speed maintained for up to 130 images (JPEG)[5][6](with UDMA card), 25 images (RAW)) [7] [6]
LIVE VIEW MODE		
	Type	Electronic viewfinder with image sensor
	Coverage	Approx. 100% (horizontally and vertically)
	Frame Rate	30 fps
	Focusing	Manual Focus (Magnify the image 5x or 10x at any point on screen) Autofocus: Quick mode, Live mode, Live Face detection mode
	Metering	Real-time evaluative metering with image sensor Active metering time can be changed
	Display Options	Grid overlay (x2), Histogram
FILE TYPE		
	Still Image Type	JPEG: Fine, Normal (Exif 2.21 [Exif Print] compliant) / Design rule for Camera File system (2.0), RAW: RAW, M-RAW, S-RAW (14bit, Canon original RAW 2nd edition), Digital Print Order Format [DPOF] Version 1.1 compliant
	RAW+JPEG simultaneous recording	Yes, any combination of RAW + JPEG, M-RAW + JPEG, S-RAW + JPEG possible.
	Image Size	JPEG: (L) 5184x3456, (M) 3456x2304, (S) 2592x1728 RAW: (RAW) 5184x3456, (M-RAW) 3888x2592, (S-RAW) 2592x1728

	Movie Type	MOV (Video: H.264, Sound: Linear PCM, recording level can be manually adjusted by user)
	Movie Size	1920 x 1080 (29.97, 25, 23.976 fps) 1280 x 720 (59.94, 50 fps) 640 x 480 (59.94, 50 fps)
	Movie Length	Max duration 29min 59sec, Max file size 4GB
	Folders	New folders can be manually created and selected
	File Numbering	Consecutive numbering Auto reset Manual reset
OTHER FEATURES		
	Custom Functions	27 Custom Functions with 70 settings
	Metadata Tag	User copyright information (can be set in camera) Image rating (0-5 stars)
	LCD Panel / Illumination	Yes / Yes
	Water/ Dust resistance	Yes (equal to EOS-1N)
	Sound Memo	No
	Intelligent Orientation Sensor	Yes
	Playback zoom	1.5x - 10x
	Display Formats	Single image with information (2 levels) Single image 4 image index 9 image index Magnified view
	Slide Show	Image selection: All images, by Date, by Folder, Movies, Stills, Rating Playback time: 1/2/3/5 seconds Repeat: On/Off
	Histogram	Brightness: Yes RGB: Yes
	Highlight Alert	Yes
	Image Erase/Protection	Erase: Single image, All images in folder, Checkmarked images, unprotected images Protection: Erase protection of one image at a time
	Menu Categories	Shooting menu (x4) Playback menu (x2) Setup menu (x3) Custom Functions menu My Menu
	Menu Languages	25 Languages English, German, French, Dutch, Danish, Portuguese, Finnish, Italian, Norwegian, Swedish, Spanish, Greek, Russian, Polish, Czech, Hungarian, Romanian, Ukrainian, Turkish, Arabic, Thai, Simplified Chinese, Traditional Chinese, Korean and Japanese
	Firmware Update	Update possible by the user
INTERFACE		
	Computer	Hi-Speed USB
	Other	HDMI mini output, Video output (PAL/ NTSC), Extension system terminal (for WFT-E5), External microphone (Stereo mini jack)
DIRECT PRINT		
	Canon Printers	Canon Compact Photo Printers and PIXMA Printers supporting PictBridge
	PictBridge	Yes

STORAGE		
	Type	CompactFlash Type I/ II (Microdrive compatible, UDMA compatible), external storage with WFT-E5
SUPPORTED OPERATING SYSTEM		
	PC & Macintosh	Windows XP (SP2/SP3) / Vista inc SP1 (excl. Starter Edition) / 7 (excl. Starter Edition) OS X v10.6-10.7
SOFTWARE		
	Browsing & Printing	ImageBrowser EX
	Image Processing	Digital Photo Professional
	Other	PhotoStitch, EOS Utility (inc. Remote Capture, WFT utility[8]), Picture Style Editor
POWER SOURCE		
	Batteries	Rechargeable Li-ion Battery LP-E6 (supplied), 1xCR1616 for date & settings
	Battery life	Approx. 800 (at 23ºC, AE 50%, FE 50%) [9] Approx. 750 (at 0ºC, AE 50%, FE 50%)
	Battery Indicator	6 levels + percentage
	Power saving	Power turns off after 1, 2, 4, 8, 15 or 30mins
	Power Supply & Battery Chargers	AC Adapter Kit ACK-E6, Battery charger LC-E6, Car Battery charger CBC-E6
PHYSICAL SPECIFICATIONS		
	Body Materials	Magnesium Alloy body covers
	Operating Environment	0 – 40 ºC, 85% or less humidity
	Dimensions (WxHxD)	148.2 x 110.7 x 73.5mm
	Weight (body only)	Approx. 820g
ACCESSORIES		
	Viewfinder	Eyecup Eg, Dioptric adjustment lens Eg, Anti-Fog Eyepiece Eg
	Case	EH20-L
	Wireless File Transmitter	Wireless File Transmitter WFT-E5
	Lenses	All EF and EF-S lenses
	Flash	Canon Speedlites (220EX, 270EX, 270EX II, 320EX, 420EX, 430EX, 430EX II, 550EX, 580EX, 580EX II, 600EX, 600EX-RT, Macro-Ring-Lite, MR-14EX, Macro Twin Lite MT-24EX, Speedlite Transmitter ST-E2, Speedlite Transmitter ST-E3-RT)
	Battery Grip	BG-E7
	Remote Controller/ Switch	Remote control with N3 type contact, Wireless Controller LC-5, Remote Controller RC-1/RC-5
	Other	Hand Strap E2, GP-E2

All data is based on Canon standard testing methods except where indicated.
Subject to change without notice.

[1] Peripheral Cross type AF points will not function as a cross type AF points with the following lenses: EF 35-80mm f4-5.6 (II/III/USM), EF35-105mm f4.5-5.6 (USM). EF 80-200mm f4.5-5.6 (II)

[2] With EF300mm f/2.8L IS USM at 50kph

[3] Recommended Exposure Index

[4] With 50mm lens at infinity, -1m^{-1} dpt

[5] Large/Fine(Quality 8) resolution

[6] Maximum fps and buffer capacity may be reduced depending on the cameras settings and light level

[7] Based on Canon's testing conditions, JPEG, ISO 100, Standard Picture Style. Varies depending on the subject, memory card brand and capacity, image recording quality, ISO speed, drive mode, Picture Style, Custom functions etc.

[8] Requires optional accessory

[9] Based on the CIPA Standard and using the batteries and memory card format supplied with the camera, except where indicated